



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/892,015	06/25/2001	Khoi Hoang	60595-300801

CONFIRMATION NO. 2659

25696
OPPENHEIMER WOLFF & DONNELLY LLP - SILICON VALLEY
1400 PAGE MILL ROAD
PALO ALTO, CA 94304

FORMALITIES LETTER



OC000000006349163

Date Mailed: 07/26/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 130.**

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

08/28/2001 EEKUBAY1 00000021 09892015

01 FC:105 130.00 UP

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY



#4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Khoi Hoang, et al. Docket No: 60595-300801
Application No: 09/892,015 Group Art Unit: 2152
Filed: June 25, 2001 Examiner: Not Assigned Yet
For: **COUNTERFEIT STB PREVENTION THROUGH PROTOCOL SWITCHING**

LETTER TO THE OFFICIAL DRAFTSMAN

Attn: Official Draftsman
Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

Subject to the approval of the Examiner, please substitute the enclosed 11 sheets of formal drawings for the informal drawings originally filed with the application.

Respectfully submitted,

DATE: August 22, 2001

Brian R. Coleman
Reg. No: 39,145

OPPENHEIMER WOLFF & DONNELLY LLP
CUSTOMER NO. 25696
1400 Page Mill Road
Palo Alto, CA 94304
Tel. No: (650) 320-4000
Fax. No: (650)320-4100

CERTIFICATE OF MAILING (37CFR 1.8 (a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited on August 22, 2001 with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231.

Date: August 22, 2001

Sheena Hicks



UNITED STATES PATENT AND TRADEMARK OFFICE

SECTOR
#

Applicant: Khoi Hoang, et al. Docket No: 60595-300801
Application No: 09/892,015 Group Art Unit: 2152
Filed: June 25, 2001 Examiner: Not Assigned Yet

For: COUNTERFEIT STB PREVENTION THROUGH PROTOCOL SWITCHING

Box Missing Parts
Commissioner of Patents
Washington, D.C. 20231

TRANSMITTAL FOR RESPONSE TO NOTICE TO FILE MISSING PARTS

Enclosed herewith for filing in the above-identified application are the following:

- ☒ Copy of Notice to File Missing Parts of NonProvisional Application (Filing Date Granted);
- ☒ Executed Declaration, Power of Attorney and Petition;
- ☒ Check No.: 126377 in the amount of \$130.00 for payment of the Missing Parts required fee;
- ☒ Letter To The Official Draftsman;
- ☒ Formal Drawings (11 Sheets) and
- ☒ Postcard for date-stamped return as confirmation of receipt of these items.

Total fees due in this application amount to \$130.00. The Commissioner is further authorized to charge any required additional fees, or credit any overpayment, to deposit account 02-3964.

Respectfully submitted,

Date: August 22, 2001

Brian Coleman
Reg. No. 39,145

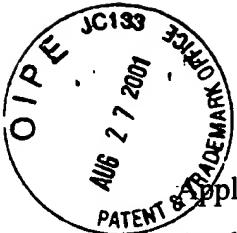
OPPENHEIMER WOLFF & DONNELLY LLP
CUSTOMER NO. 25696
1400 Page Mill Road
Palo Alto, CA 94304
Tel: (650) 320-4000
Fax: (650) 320-4100

CERTIFICATE OF MAILING (37CFR 1.8 (A))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited on August 22, 2001 with the U.S. Postal Service as first class mail in an envelope addressed to: Box Missing Parts, Commissioner for Patents, Washington, D.C. 20231.

Date: August 22, 2001

Sheena Hicks



Receipt
#7

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Khoi Hoang, et al. Docket No: 60595-300801
Application No: 09/892,015 Group Art Unit: 2152
Filed: June 25, 2001 Examiner: Not Assigned Yet
For: **COUNTERFEIT STB PREVENTION THROUGH PROTOCOL SWITCHING**

Office of Initial Patent Examination Division
Customer Service Center
Commissioner For Patents
Washington, D.C. 20231

RECEIVED

NOV 02 2001

REQUEST FOR CORRECTED FILING RECEIPT

Technology Center 2100

Sir:

Enclosed is a red-lined copy of the Filing Receipt showing the change, for the above-identified patent application, copy of the Utility Patent Application Transmittal dated June 25, 2001, a copy of page one of the Specification, a copy of the Declaration, Power of Attorney and Petition and evidencing the desired correction. Please reprint the Filing Receipt as follows and mail the corrected copy to the undersigned.

This application is incorrectly entered as :

"Tony Qu, Residence Not Provided;"

"THIS APPLICATION IS A CIP OF 09/584,832 05/31/2000"

Please correct this application to read:

"Tony Qu, San Ramon, CA;"

"THIS APPLICATION IS A CIP OF 09/870,879 05/30/2001

AND A CIP OF 09/841,792 04/24/2001

AND A CIP OF 09/709,948 11/10/2000

AND A CIP OF 09/584,832 05/31/2000"

Please reprint the Filing Receipt as follows and mail the corrected copy to the undersigned.

CERTIFICATE OF MAILING (37CFR 1.8 (a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited on August 23, 2001 with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231.

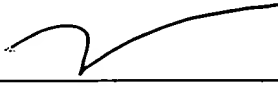
Date: August 23, 2001

Sheena Hicks
Sheena Hicks

The correction is not due to any error by applicant and no fee is due. However, in the event that a fee is due, the Commissioner is hereby authorized to charge any such fees to Deposit Account 02-3964.

Respectfully submitted,

Dated: August 23, 2001



Brian R. Coleman
Reg. No. 39,145

OPPENHEIMER WOLFF & DONNELLY LLP
Customer No.: 25696
1400 Page Mill Road
Palo Alto, CA 94304
Tel: (650) 320-4000
Fax: (650) 320-4100



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO.	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/892,015	06/25/2001	2152	1302	60595-300801	11	44	5

CONFIRMATION NO. 2659

25696
OPPENHEIMER WOLFF & DONNELLY LLP - SILICON VALLEY
1400 PAGE MILL ROAD
PALO ALTO, CA 94304

FILING RECEIPT



OC000000006349162

Date Mailed: 07/26/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Khoi Hoang, Pleasanton, CA;
Tony Qu, Residence Not Provided;

Tony Qu, San Ramon, CA;

Domestic Priority data as claimed by applicant

THIS APPLICATION IS A CIP OF 09/584,832 05/31/2000
AND A CIP OF 09/709,948 11/10/2000
AND A CIP OF 09/841,792 04/24/2001

THIS APPLICATION IS A CIP OF 09/870,879, 05/30/2001

Foreign Applications

AND A CIP OF 09/841,792 04/24/2001

AND A CIP OF 09/709,948 11/10/2000

If Required, Foreign Filing License Granted 07/26/2001

AND A CIP OF 09/584,832 05/31/2000

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

Counterfeit STB prevention through protocol switching

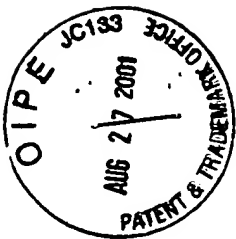
Preliminary Class

Precedence

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NOV 2 2001

Technology Center 2100



EL745058185US

IN THE UNITED STATES PATENT AND TRADEMARK

Box Patent Application
Commissioner of Patents
Washington, D.C. 20231

Attorney's Docket No.: 60595-300801
(PREDP008)

FILING TRANSMITTAL

Transmitted herewith for filing is the Patent Application of : **Khoi Hoang, et al.**

For: **COUNTERFEIT STB PREVENTION THROUGH PROTOCOL SWITCHING**

RECEIVED

Nov 02 2001

ENCLOSURES

Technology Center 2100

- ☒ 22 page application including specification, claims and abstract;
- ☒ 11 sheets (Figs. 1 - 11) of ☒ informal/☐ formal drawings;
- ☒ A Declaration, Power of Attorney & Petition (☐ signed/☒ unsigned);
- ☒ A postcard for return to us as proof of receipt of the referenced documents.

and

- ☐ An Assignment of the invention with an assignment cover sheet;
- ☐ Applicant claims small entity status (Under 37 CFR 1.27);
- ☒ IDS (form PTO-1449) and copies of references;
- ☐ An Associate Power of Attorney;
- ☐ A certified copy of the priority document (Under 35 USC 119);
- ☐ A Power of Attorney by Assignee;
- ☐ Other: Request and Certification Under 35 USC 122(b)(2)(B)(i).

TYPE OF FILING

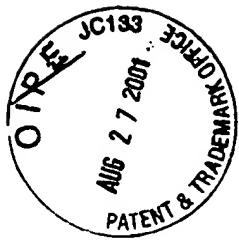
- ☒ This application claims the benefit of an earlier filed Patent Application Number 09/584,832, filed on May 31, 2000, Patent Application Number 09/709,948, filed November 10, 2000, Patent Application Number 09/841,792, filed on April 24, 2001, Patent Application Number 09/870,879, filed on May 30, 2001 (35 USC 120).
- ☐ This application claims the benefit of the priority date of an earlier provisional patent application (35 USC 119).
- ☐ This is an application filed pursuant to 37 CFR 1.53, permitting receipt of a filing date upon filing of specification, claims and drawings, if required, with applicant being given a period of one month from the date of notice to file the fee and oath or declaration.
- ☒ In the event any parts of this application are missing, please treat this as a filing under 37 CFR 1.53 as defined just above.

CERTIFICATE OF MAILING (37 CFR 1.10(A))

CERTIFICATE OF MAILING BY "EXPRESS MAIL" - Rule 10: I hereby certify that this correspondence is being deposited with the U. S. Postal Service "Express Mail Post Office to Addressee" under 37 CFR 1.10 as Express Mail No. EL745058185US addressed to the Box Patent Application, Commissioner of Patents, Washington, D.C. 20231 on June 25, 2001 by Sheena Hicks.

Date: June 25, 2001

Sheena Hicks
Sheena Hicks



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AUG 27 2001

Specification

COUNTERFEIT STB PREVENTION THROUGH
PROTOCOL SWITCHING

Technology Center 2100

BACKGROUND OF THE INVENTION
RELATED APPLICATIONS

This application is a continuation-in-part claiming priority to Khoi Nhu Hoang's patent applications entitled UNIVERSAL STB ARCHITECTURES AND CONTROL METHODS filed on May 30, 2001, SYSTEMS AND METHODS FOR PROVIDING VIDEO ON DEMAND SERVICES FOR BROADCASTING SYSTEMS filed on May 31, 2000, bearing application number 09/584,832, METHODS FOR PROVIDING VIDEO ON DEMAND filed November 10, 2000, bearing application number 09/709,948 and UNIVERSAL DIGITAL BROADCAST SYSTEM AND METHODS filed on April 24, 2001, bearing application number 09/841,792, all three being incorporated herein by reference.

FIELD OF THE INVENTION

The present invention relates to data-on-demand (DOD) and digital broadcast technology. In particular, the present invention teaches a method for preventing counterfeit set-top-boxes (STBs) from pirating proprietary data transmissions.

DESCRIPTION OF THE PRIOR ART

A variety of mechanisms are available for verifying the authenticity of set top boxes for receiving video on demand (VOD) programs for display on a television or other video display device. One problem faced in the VOD and DOD industry is the counterfeiting of the STB and the pirating of the signal. Traditional uni-directional communications, such as cable, have had many problems in attempting to stop people from pirating cable. The advent of the STB allowed a mixed signal to be sent only to persons with a STB capable of de-scrambling the signal would be able to decode the signal properly. However, a counterfeit STB could still be used to de-scramble the signal. Using bi-directional communications allowed for a certain level of authenticity verification, however this would use significant processing and bandwidth resources and will not work in uni-directional systems.



THE STAMP OF THE U.S. PATENT AND TRADEMARK OFFICE HEREON
ACKNOWLEDGES RECEIPT OF THE FOLLOWING:

☒ PAT UTIL ☐ PAT. DES. ☐ PROV. PAT
Applicant(s): Khoi Hoang, et al. Serial No.: 09/892,015
Filed: June 25, 2001 Group Art Unit: 2152
For: COUNTERFEIT STB PREVENTION THROUGH PROTOCOL
 SWITCHING

Enclosed:

- ☒ Request for Corrected Filing Receipt (1 page);
 - ☒ A red-lined copy of Official Filing Receipt (1 page);
 - ☒ Copy of Utility Patent Application Transmittal (1 Page);
 - ☒ Copy of page one of the Specification (1 Page);
 - ☒ Copy of Executed Declaration, Power of Attorney and Petition (Signed) (2 pages);
- and ☒ Return Postcard.

Our Ref No.: 60595-300801
Date: August 23, 2001 Initials: BRC/sh

SV: 222962 v01 08/23/200



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WASHINGTON, D.C. 20231
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Bib Data Sheet

CONFIRMATION NO. 2659

SERIAL NUMBER 09/892,015	FILING DATE 06/25/2001 RULE	CLASS 709	GROUP ART UNIT 2152	ATTORNEY DOCKET NO. 60595-300801
APPLICANTS Khoi Hoang, Pleasanton, CA; Tony Qu, San Ramon, CA;				
** CONTINUING DATA ***** THIS APPLICATION IS A CIP OF 09/870,879 05/30/2001 AND A CIP OF 09/841,792 04/24/2001 AND A CIP OF 09/709,948 11/10/2000 AND A CIP OF 09/584,832 05/31/2000				
** FOREIGN APPLICATIONS *****				
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 07/26/2001				
Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no 35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance Verified and Acknowledged _____ Examiner's Signature _____ Initials _____		STATE OR COUNTRY CA	SHEETS DRAWING 11	TOTAL CLAIMS 44 INDEPENDENT CLAIMS 5
ADDRESS 25696				
TITLE Counterfeit STB prevention through protocol switching				
FILING FEE RECEIVED 1432	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	